U.S. Sen. Jeff Sessions (R-AL)

Request for Funding Fiscal Year 2011

WASHINGTON—U.S. Sen. Jeff Sessions (R-AL) made the following comments regarding the federal appropriations process:

"I am pleased to lend my support to a number of meritorious projects in Alabama that should be given strong consideration for funding in this year's appropriations process.

"Under our Constitution, Congress—whose members are directly elected by and accountable to their constituents—has the sole authority to appropriate taxpayer money. When doing so, it is critical that Congress works within the constraints of the annual federal budget. If approved, the funding for the projects I am submitting would come completely from previously budgeted funds and would not increase federal spending or add to the debt in any way.

"The earmark process is ripe for reform, and I have cosponsored and voted in favor of, a moratorium on earmarks until that reform is implemented. Unfortunately, a majority of my colleagues oppose such a measure. I remain very uneasy about this process, but, so long as the current system is in place, I have an obligation to ensure that the people of Alabama see a fair share of their tax dollars invested in their state. Absent someone fighting for these projects, the funding would likely be directed to other states.

"My office receives nearly 600 non-defense requests for funding each year, far more than the committee will include. I am submitting a number of those requests that stand the best chance of approval, given their broad local support and potential to improve our communities and foster economic growth. Competition for appropriations will be tough. Based on past experience, only a very small number of those projects submitted will receive funding.

"This is one reason why I emphasize competitive grants, an alternative method of funding where experts at the 26 federal grant-making agencies use published criteria to select the most worthy grant applications. A full-time member of my staff is available to help local leaders in Alabama apply for competitive funding, and I am pleased to have supported successful applications that have resulted in \$210 million in competitive grants for Alabama initiatives over the last three years."

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DEFENSE AUTHORIZATION

Item: Adaptive Robotics Technology for Space, Air, and Missiles (ART-SAM)

Request: \$5,400,000

Account: Research, Development, Test, and Evaluation, Army

Line: 53 **PE:** 0603305A

Suggested Recipient: Army Space and Missile Defense Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Advanced robotic hardware and software will assist in highly effective missile defense systems (radars, launchers, command, control and communications equipment) operating in quicker, more reliable and accurate processes to meet urgent U.S. Army Space and Missile Defense Command worldwide critical battlefield requirements. This R&D initiative develops adaptive robotics technology with emphasis on battlefield integration of unmanned space, aerial and ground systems for surveillance, reconnaissance, discrimination and intelligence resource management. ART-SAM funds will advance the ART-SAM Robotics Test Bed by employing and testing developed products and technologies for existing and emerging SMDC supported systems. The ART-SAM test bed will continue to evolve by employing plug & play robotics technology to be modeled, simulated, and then transitioned to replicate prototypes to meet SMDC robotics technology requirements.

Item: Advanced Commercial Technology Insertion

Request: \$6,000,000

Account: Research, Development, Test and Evaluation, Army

Line: 46 **PE:** 0603313A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: To enhance the capabilities and efficiencies of the Army Aviation and Missile Research, Development and Engineering Center (AMRDEC) through a systematic and planned initiative that will: (1) identify new state of the art commercially-available cutting edge technology with the potential for enhancing the capabilities and efficiencies of existing and planned AMRDEC laboratories; (2) continue the evaluation of competing technologies and products, analyze cost-benefit trade-offs in implementing the technologies, and provide recommendations for implementation; (3) refine the designs and complete the implementation of the new technology into existing laboratories while minimizing impact to AMRDEC'S customers; (4) install new technologies and train operators; and (5) provide support for the technologies as required. Under FY09 and FY10 funding this program has completed the evaluation/insertion of advanced technologies. These advancements have led to expanded AMRDEC ASC capabilities providing direct benefits for the PAC3, THAAD, Raven, Viper Strike, PAM, NLOS, CMWS and MDA weapon systems. This FY11 initiative will add funds to complete the development and demonstration of the MAST, MEMS and PSUAS systems. It will culminate in field demonstration of all three systems as well as transition to the OSD Test and Evaluation community for fielding of these advanced test capabilities.

Item: Advanced Data Analytics for Conditioned Based Maintenance of

Weapon Systems

Request: \$1,000,000

Account: Research, Development, Test and Evaluation, Army

Line: 55

PE: 0603327A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This project will design and develop state of the art predictive algorithms for detecting and classifying conditions and weapon system states that could result in system malfunction or failure. The overarching goal is to enable predictive maintenance which involves establishing maintenance actions and schedules based on real-time monitoring of the health of a system or structure. It improves longevity, usability, and safety by predicting future failures while simultaneously saving significant cost through elimination of the need for unnecessary overhaul and replacement of components. Funding will be used for personnel costs and the cost of planned physical testing and experimentation to be conducted at Redstone Arsenal.

Item: AH-64 Fuselage Manufacturing

Request: \$5,500,000

Account: Aircraft Procurement, Army

Line: 9

Suggested Recipient: Army PEO Aviation

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Due to the extended, high OPTEMPO of combat operations in OIF and OEF, the useful life of the Apache airframes is being rapidly consumed. Given the Block III will be the future force attack helicopter through 2040 and beyond, it will be remanufactured with a new airframe by Boeing. Currently, there is only one source for the Block III airframe and it is not manufactured domestically. This funds request will procure one set of special tooling and qualify a domestic source for the manufacture of this critical Apache airframe assembly with a substantial increase in the current manufacturing capability required by the program office.

Item: Application Software Assurance Center

Request: \$6,950,000

Account: Other Procurement, Air Force

Line: 35

Suggested Recipient: Maxwell-Gunter AFB

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Cyber attacks against Department of Defense Information Systems continue to increase in both volume and complexity. Web applications are the primary target for attackers due to a lack of inherent security and the immediate access to sensitive information gained when even a single web application is compromised. These applications exist across all functional communities in the Air Force and can ultimately impact the Air Force's critical command and control functions. The center's mission is to secure these web applications while ensuring the Air Force is able to securely carry out its critical missions in cyberspace to support the warfighter.

Item: Army Aviation Robotic Systems Laboratory

Request: \$2,500,000

Account: Research, Development, Test and Evaluation, Army

Line: 8

PE: 0602211A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Army has prioritized integrating robotic Unmanned Aerial Systems into warfighter operations to support reconnaissance and offensive engagement missions and ultimately reducing the loss of life. Poorly designed and integrated UASs produce inefficiencies and frustration, and possibly failures that will jeopardize the mission and possibly the life of the warfighter. Validated UAS system design and test methodologies are needed that consider the mechanical design, sensor/weapon integration, reliability and sustainability, as well as the human operator. The requested appropriation would be provide experts, facilities, and educational programs to create a multi-disciplinary Aviation

Robotic Systems Laboratory whose capabilities span the life cycle from design through implementation including sustainability and supply chain impacts. This multi-disciplinary program is unique in the country and will supply the Army future employees trained across the UAS life cycle in "systems thinking" with the ability to design and manage complex systems such as UAS.

Item: Army Cyber Defense Integration

Request: \$6,000,000

Account: Research, Development, Test and Evaluation, Army

Line: 10

PE: 0602303A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: There is an urgency for the capability to analyze, detect, protect, and prevent cyber attacks against Army systems. Cyber attacks have become a major threat to U.S. military personnel deployed overseas, particularly in Iraq and Afghanistan. U.S. forces are dependent on computers, computer networks, and computer enabled weapon systems that can be attacked or compromised thus reducing the ability to support Overseas Contingency Operations. The U.S. Army Aviation and Missile Research Development and Engineering Center's Software Engineering Directorate (SED) would use the requested funding to establish an integrated cyber defense for Army components and systems.

Item: Army Responsive Tactical Space System Exerciser (ARTSSE)

Request: \$3,000,000

Account: Research, Development, Test & Evaluation, Army

Line: 44

PE: 0603313A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance): As determined by the suggested recipient

Purpose/Project Description: Army Responsive Tactical Space System Exerciser (ARTSSE) is a Hardware-in-the-Loop (HWIL) test facility designed to support testing of technologies critical to the Army Operationally Responsive Space (ORS) mission. The ARTSSE capability, along with system flight testing, will fully address the existing need to define performance requirements, evaluate and execute the Army Responsive Tactical Space Systems needed to ensure the warfighter's continued access to air and space. By cost effectively increasing confidence in system reliability and performance prior to the commitment of flight test resources, ground testing is a proven and affordable means of ensuring the success of flight programs. AMRDEC will provide this capability to Army Operationally Responsive Space (ORS) and Unmanned Aerial Systems (UAS) programs with further added value by capitalizing on an existing software infrastructure. ARTSSE will reduce program risk and cost while increasing the overall understanding and predictability of Army air and space systems. The requested funding level will ensure the availability of the initial HWIL capability in 12 months with full functionality in 24 months. This delivery schedule will allow Army UAS and ORS programs to maintain program schedules and cost while mitigating risk to upcoming flight tests.

Item: Blast Protection for Ground Soldiers

Request: \$2,500,000

Account: Research, Development, Test, and Evaluation, Army

Line: 28 **PE:** 0602787A

Suggested Recipient: Army Aeromedical Research Laboratory

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This project will provide enhanced head and neck protection with improved helmets for ground soldiers against explosion blast injuries. Better understanding of explosion blast interactions with protective equipment and human head injury biomechanics will result in reduced casualties and improved medical treatments. This request will develop modeling tools, experimental procedures and new head protective armor to protect against blast wave head injury. Funds will be used for building a blast test stand, fabricate head/helmet prototypes, purchase necessary instrumentation, and conduct modeling and tests.

Item: Civil Air Patrol Operations and Maintenance

Request: \$4,500,000

Account: Operation & Maintenance, Air Force

Line: 042I

Suggested Recipient: Civil Air Patrol

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Civil Air Patrol (CAP) is a cost effective force multiplier for the Air Force, it currently executes 60 to 80 percent of all daily sorties flown by 1st Air Force. Using low-cost, high-technology aircraft, the CAP flies missions for an average cost of only \$130 per flight hour. CAP volunteers also fly a wide variety of emergency and operational missions in support of federal agencies, states, local communities and other public service organizations. All CAP missions are flown by volunteer professionals donating their time. Approved funding would significantly increase readiness to support search and rescue, homeland security and disaster relief missions as well as CAP's ability to provide community service and youth leadership/development initiatives. It would also improve critical aircrew safety, mission readiness and mission effectiveness rates.

Item: Coordinated Smart Weapon Target Cueing

Request: \$2,500,000

Account: Research, Development, Test, and Evaluation, Army

Line: 44

PE: 0603313A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center Suggested Location of Performance: As determined by the suggested recipient Purpose/Project Description: The purpose of the Coordinated Smart Weapon Target Cueing program request is to provide the warfighter the ability to network legacy weapons in order to coordinate offensive action against various types of enemy formations. For example, networked cueing will allow Javelin gunners to designate targets for other Javelin teams or weapons platforms as part of a synchronized attack much like Apache Longbow or Kiowa Warrior helicopters do in aviation formations today. Networking will also allow Javelin gunners to designate targets for weapons on loitering UAV's or helicopters. A network interface will be developed capable of supporting various smart weapon systems such as TOW, Hellfire, and JAMS. This design will be demonstrated in prototype hardware for the JAVELIN Missile and undergo laboratory testing in FY11 for the purpose of design maturation.

Item: Cyber Assurance Tool Set (CATS)

Request: \$5,000,000

Account: Research, Development, Test and Evaluation, Army

Line: 54

PE: 0603308A

Suggested Recipient: Army Space and Missile Defense Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Cyberspace Assurance Tool Set (CATS) will allow U.S. Army Space and Missile Command (SMDC) to develop and employ network embedded weapons systems in a cyberspace threat environment in order to test system vulnerabilities to cyber attack. CATS will ensure forces have unprecedented levels of situational awareness, data distribution, and operational coordination. CATS also address Integration of Offensive and Defensive Space Control Elements, Operationally Responsive Space, and Prompt Global Strike cyber assurance efforts. CATS will be used for simulation and modeling of cyberspace characteristics of network enabled weapon systems; vulnerability and risk assessment of these systems; mitigation to hostile forces attempts at deception, disruption, and/or destruction of networked weapon systems; certification and accreditation of operational networked systems to support tactical and strategic missions; and training developers and warfighters on use of capabilities.

Item: DoD Sponsored Educational Outreach Resource Center

Request: \$1,400,000

Account: Operation & Maintenance, Army

BA: 04 **Sub-Activity Group:** 422

Suggested Recipient: Army Aviation and Missile Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This regional DoD Work Force Initiative will develop human capital (K-12, college and university) through educational outreach impacting the DoD community at Redstone Arsenal. Funding will establish an Educational Outreach Resource Center, which is part of a collaborative partnership with current programs supporting Team Redstone and surrounding counties, city schools (private and parochial), colleges and universities. Included in this request are the facilities, manpower, curriculum materials, and multi-media needed to educate K-12 students, teachers, college and university faculty and the general public relative to the business and technical needs of the DoD to support future workforce requirements of America's defense organizations and our soldiers. This effort will address the low volume of business and technical professionals that America's high schools and colleges are producing.

Item: Enhanced Gun Fire Detection on UAS

Request: \$4,500,000

Account: Research, Development, Test & Evaluation, Army

Line: 31

PE: 0603003A

Suggested Recipient: Army Research, Development and Engineering Command **Suggested Location of Performance:** As determined by the suggested recipient

Purpose/Project Description: U.S. Ground and Airborne Tactical Forces lack the ability to detect Hostile Fire Points of Origin (POO) to effectively counterfire or avoid. Using UAV's to detect these POOs provides the means to gain tactical superiority without dangerously exposing manned aircraft against threat systems. Unguided, undetected threat weapon systems such as Small Arms, AAA, and RPGs inflict over 90 percent of the total combat damages to rotary wing aircraft while random mortar fires immobilize our FOBs. This funding will develop, test, and demonstrate the Airborne WeaponWatch® Gun Fire Acquisition System (AWW-GFAS) on a UAV. AWW-GFAS can operate continuously over the battlefield detecting, locating and targeting active weapon systems in 5-50 milliseconds, subsequently disseminating this critical information to the airborne crews and command centers capable of taking immediate action. The urgent need for this capability is documented in the draft U.S. Army Initial Capabilities Document for Aircraft Survivability dated 20 July 2009.

Item: Enhanced Rapid Tactical Integration and Fielding Systems

(ERTIFS)

Request: \$5,500,000

Account: Research, Development, Test & Evaluation, Army

Line: 31

PE: 0603003A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The primary focus of the Software Engineering Directorate's (SED) E-RTIFS effort is the development of an Open-System Distributed Development and Test Architecture (ODDTA) to meet critical software system reliability needs. OODTA provides early identification of software reliability issues that will limit cost and schedule overruns with Aviation/Missile System development. The ODDTA capability will leverage significant investments that have been made by Army Aviation and Missile PM's to establish government-owned test capabilities currently being utilized to support a number of requirements for individual tactical systems. These investments will be leveraged by the establishment of the ODDTA to support required reliability certification tests in the tactical environment.

Item: Enhanced Sensor and Data Security Initiative (ESDSI)

Request: \$5,000,000

Account: Research, Development, Test and Evaluation, Army

Line: 34

PE: 0603006A

Suggested Recipient: Army Space and Missile Defense Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The ESDSI demonstration project enables the U.S. Army's Space and Missile Defense Command (SMDC) to provide calibrated and validated imagery and other operational data securely on the minutes-to-seconds timelines required to provide warfighters with immediate information. ESDSI is an efficient, well designed, cyber-protected, efficient data system which combines proven and advanced technologies with subject matter experts to enable warfighters to use all of the data available from current and emerging data collection assets. ESDSI will demonstrate the cost-effective force-multiplication benefits by enhancing the timely and secure flow of data for real-time analysis to support the quick-response required by system operators, area commanders and warfighters, thereby reducing risk and ensuring positive engagement outcomes.

Item: FASTSAT Microsatellite-Based On-Orbit Cubesat Deployer

Request: \$5,000,000

Account: Research, Development, Test and Evaluation, Army

Line: 54

PE: 0603308A

Suggested Recipient: Army Space and Missile Defense Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: FASTSAT provides affordable, on-demand space support, augmentation, and reconstitution capability to the warfighter on the battlefield. These small satellites reduce the time from call-up to operation and will rapidly provide tactical data directly to the battlefield. This capability is complementary to that already provided by large National systems, such as strategic intelligence and position location information. The \$5M request level will allow development of the FASTSAT Cubesat Deployer to its critical design review (CDR) and start the ordering of long lead items for the satellite hardware.

Item: FOB Support Simulation Architecture (FSSA)

Request: \$4,300,000

Account: Research, Development, Test & Evaluation, Army

Line: 84

PE: 0604633A

Suggested Recipient: Army PEO Aviation

Suggested Location of Performance: As determined by the suggested recipient **Purpose/Project Description:** The Forward Operating Base Support Simulation Architecture (FSSA) will focus situational awareness solutions towards the most crowded airspace in the highest priority areas of interest -- Forward Operating Base operations. The number one combat aviation safety concern of joint and Army aviation unit commanders is a mid-air collision due to extremely high air traffic density and the complexity associated with operating in joint airspace. To address this significant concern, commanders require an area-coverage, low-level, consolidated air picture with unambiguous Combat Identification that provides for greatly increased situational awareness while reducing mission execution risk for all airspace users. While fully documented, this requirement is not resourced, but is listed on the Unfunded Requirements (UFR) list.

Item: Highly Integrated Production for Expediting Reset (HIPER)

Request: \$6,200,000

Account: Research, Development, Test & Evaluation, Army

Line: 17

PE: 0602624A

Suggested Recipient: Army Armament Research, Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The most critical readiness issue facing the military today is repairing and restoring – otherwise known as "resetting" – military equipment that has been damaged or worn out in battle. Resetting small arms and crew served weapons is particularly challenging, given their sheer numbers and the fact that, according to Anniston Army Depot (our sponsor), there is a growing incidence of non-conforming parts used to support reset operations there. In addition, under the current system, a lot of time and cost are required to design and apply product improvements during reset. HIPER ensure a quick and efficient RESET turn-around for weapons to the theater. This request is a follow-on to the HIPER program that leverages the Scanning Technology to Accelerate RESET (STAR) program at Anniston Army Depot, for which Congress has already invested \$1.6 million. Additional funding will extend that capability to the depot's Armament & Weapons Systems Division (which has responsibility for small arms RESET), and will implement a similar capability within ARDEC's rapid prototyping facility. It also leverages \$1.5M that OSD is currently investing to support the development and proveout of the "Smarter Buyer Concept" at ARDEC.

Item: Immunocontraceptive Vaccines

Request: \$2,000,000

Account: Research, Development, Test and Evaluation, Navy

Line: 124 **PE:** 0604771N

Suggested Recipient: Naval Medical Research Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This program will dramatically reduce the overpopulation of wildlife that transmit disease or cause physical damage to federal property by developing and testing contraceptive vaccines designed to limit reproduction in wild animals.

Item: Improved Safety & Quality of Combat Rations for the Warfighter

Request: \$3,700,000

Account: Research, Development, Test, and Evaluation, Army

Line: 27

PE: 0602786A

Suggested Recipient: Army Research, Development, and Engineering Command **Suggested Location of Performance:** As determined by the suggested recipient

Purpose/Project Description: The safety and quality of the food supplied to our warfighters in theater is one of the U.S. military's most important responsibilities. Because food contamination may be either inadvertent or intentional, a key component of U.S. military capability involves ensuring the safety of the warfighters' food supply. Moreover, considering that the average MRE is expected to have a shelf life of three years, the quality and flavor of the product is not always assured. While tremendous advances in the safety and quality of combat rations have been made over the years, the warfighter consistently requests improvements in the quality of MREs and the DoD is in need of improved technologies to detect and eliminate food borne pathogens without damaging the individual MRE. This funding will be used to improve the safety and quality of the U.S. military's food supply by focusing on technologies to enhance the shelf-life and taste of combat rations consumed by the warfighter, and the detection and elimination of food borne pathogens.

Item: Integrated Air and Missile Defense Scenario Generation

Request: \$6,500,000

Account: Research, Development, Test & Evaluation, Army

Line: 44

PE: 0603313A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The US Army has embarked on an incremental strategy to establish an Integrated Air and Missile Defense (IAMD) System to address concerns over capability gaps against emerging air breathing and cruise missile threats. This future IAMD system will provide a network centric system-of-systems that utilizes modular and scalable task force organizations to integrate any mix of sensors and shooters through a common IAMD battle command system. The use of networked battle command and improved capabilities for situational awareness and soldier training will dramatically increase overall system effectiveness, survivability and force protection. Robust scenario development for use in critical testing and evaluation will support design and production decision milestones and Initial Operational Capability (IOC) for the warfighter. Funding will complete development of the scenarios required for ground test and evaluation of the Integrated Air and Missile Defense (IAMD) System Capabilities. Scenario products will be integrated into the Government Hardware-in-the-Loop test environment at the U.S. Army Software Engineering Directorate for use to evaluate Command and Control solution capabilities. The scenario generation effort will improve current capabilities by gap-filling required battlefield emulation conditions necessary to mature the comprehensive test matrix.

Item: Intelligence Collection Management Tool Follow-on Development

Request: \$5,000,000

Account: Research, Development, Test & Evaluation, Defense-Wide

Line: 999 **PE:** 0305880L

Suggested Recipient: Missile and Space Intelligence Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: These tools will significantly improve the efficiency and timeliness of the foreign missile intelligence collection process from identification of collection requirements through optimization of collection asset placement. Requested funds will be used to continue the development and deployment of automated software tools to assist Missile and Space Intelligence Center (MSIC) analysts in managing their collection requirements process: determining optimum locations for placement of surface and air-based collection sensors; and the integration and dissemination of Overhead Persistent Infrared (OPIR) data.

Item: Low Cost Radially Segmented Tactical Missile System (LoCRaS)

Request: \$6,000,000

Account: Research, Development, Test, and Evaluation, Army

Line: 54

PE: 0603308A

Suggested Recipient: Army Space and Missile Defense Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Army Space Master Plan and the Army's Space Operations Concept Capability Plan outline the need for this type of system. From a command priority standpoint, this technology can be used to provide very low cost suborbital missions to support hypersonic testing of materials and subsystems, provide a low cost test methodology for satellite and space system components, conduct missions to exercise a variety of mid-to-long range sensor systems, conduct very low cost high altitude sounding rocket missions, provide a very affordable target vehicle for missile defense tests, and establish the technology basis for a long range conventional strike weapon.

This program systematically mitigates primary missile system risks early in the development process. Requested funding will provide for immediate rapid engineering prototyping and development leading to near term hardware fabrication and ground test of the missile system.

Item: Materials Processing and Applications Development Center

Request: \$4,000,000

Account: Research, Development, Test and Evaluation, Army

Line: 4

PE: 0601104A

Suggested Recipient: Army Research Laboratory

Suggested Location of Performance: As determined by the suggested recipient Purpose/Project Description: There is an urgent need for new, lightweight materials for military vehicle structures and armor solutions. The Army Research Laboratory (ARL) does not have any foundry capabilities and therefore must turn to academic and industrial partners to develop the next generation of metals working capability. This project will specifically focus on rapid development and applications insertion of emerging design, materials, and manufacturing technologies to provide solution options for many important military needs. This will provide military systems solutions for significantly improved performance, increased durability, and lower cost for both acquisition and life cycle. New lightweight materials such as advanced magnesium alloys and metal matrix composites are crucial to the development of advanced military vehicles and armor systems.

Item: Mine Resistant Ambush Protected Vehicle Virtual Trainers (MRAP-VVT)

Request: \$5,000,000

Account: Other Procurement, Army

Line: 177

Suggested Recipient: Alabama Army National Guard

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This funding will permit the procurement of one of these essential training systems. One system will allow the Alabama Army National Guard to train Soldiers prior to deployment to Iraq or Afghanistan. During current operations in Iraq and Afghanistan, more soldiers have been killed or wounded by IEDs than any other weapon. The MRAP Vehicle Virtual Trainer provides the best training available for this new family of Army combat vehicles. The trainer provides soldiers training on how to drive these vehicles and to operate cranes and mobile arms to disarm or destroy IEDs without endangering themselves.

Item: National Defense Education Diversity Initiatives

Request: \$2,000,000

Account: Research, Development, Test and Evaluation, Defense-Wide

Line: 8

PE: 0602228D8Z

Suggested Recipient: OSD National Defense Education Program

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This DoD Research and Development Capacity Building Initiative will significantly boost the ability of minority institutions to deliver quality education programs, enhance supplemental learning opportunities and increase services to public historically black colleges and universities and students. By adequately preparing future leaders of the DoD, this program is contributing to the safety and well being of this nation. Additional funds would be used to help recruit minority students who will pursue careers in defense, contribute to workforce training and continue to expand technology capacity at member schools. The non-profit Thurgood Marshall College Fund will match any DoD investment made.

Item: Non-Invasive Vectored Vaccine Research

Request: \$5,000,000

Account: Research, Development, Test and Evaluation, Navy

Line: 124

PE: 0604771N

Suggested Recipient: Naval Medical Research Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This project allows for rapid response to anthrax and influenza by producing highly protective single dose vaccines administered by droplet or spray into the nose of our military or civilian population. These vaccines are made in tissue culture and are not dependent on availability of chicken eggs. Funding will be used to (1) Manufacture cGMP vaccines (tissue culture based, antigen specific, vectored, non-replicating) against influenza and anthrax, (2) conduct pre-clinical safety studies in animal models to support IND submission to the FDA, and (3) conduct Phase I studies for anthrax and Phase II studies for pandemic flu to evaluate safety and efficacy in man.

Item: Novel Zinc Air Power Sources for Military Applications

Request: \$4,000,000

Account: Research, Development, Test and Evaluation, Army

Line: 18

PE: 0602705A

Suggested Recipient: Army Communications and Electronics Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Development of Zinc-Air andLithium-Air battery technology will significantly reduce warfighter battery carry weight. It will also reduce battery types and counts -- this lowers operational risk by reducing the need for re-supply. Lithium-Air battery technology, though still in its infancy, has a theoretical energy density of five times that of Zinc-Air and ten times standard Lithium-ion. This program will (1) develop a robust Lithium-Air Cell, (2) extend the Integrated Power System (IPS) for Zinc-Air batteries to additional soldier devices and (3) develop full production capability for the optimized Zinc-Air Gen4 cell.

Item: On-Board Vehicle Power (OBVP) Systems Development

Request: \$5,000,000

Account: Research, Development, Test and Evaluation, Army

Line: 33

PE: 0603005A

Suggested Recipient: Army Tank Automotive Research, Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Army has initiated the development and integration of On-Board Vehicle Power solutions to improve the ability of its tactical and ground combat vehicle fleet to electrically power the broad range of required electronic systems. Prior year funding integrated a vehicle with OBVP but did not provide adequate funding to test and evaluate the technology in a relevant military environment. This funding will complete necessary testing, increase TRL to 7 and target preliminary design migration to an additional class of military vehicle provided sufficient funding is made available.

Item: Open Source Research Project

Request: \$3,000,000

Account: Research, Development, Test & Evaluation, Defense-Wide

Line: 999 **PE:** 0305880L

Suggested Recipient: Missile and Space Intelligence Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Improves the capability and processes for collecting intelligence data to identify fundamental scientific research and development being pursued by adversary nations and organizations as a countermeasure to technological surprises. This program will continue the process for collecting open-source information on foreign scientific research related to weapon development. Identifying this type of research will help to identify advanced scientific developments, focus other intelligence collection assets, and mitigate technological surprises from potential adversaries.

Item: Post-Traumatic Stress Disorder and Genomics

Request: \$3,150,000

Account: Research, Development, Test and Evaluation, Army

Line: 30 PE: 0603002A

Suggested Recipient: Army Medical Research and Materiel Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This proposal establishes a foundational study to collaborate with military physicians on work that could lead to treatments and tests for post-traumatic stress disorder (PTSD). The research would probe one million variations in the human genome to determine which genes contribute to symptoms of, and possible resistance to, PTSD. Resulting data could be used in the following ways: development of a predictive test for prognosis in individuals demonstrating PTSD; identification of genes for potential targets for drug development to prevent or alleviate PTSD symptoms; understanding of the mechanisms that result in the expression of PTSD symptoms (i.e. why some develop PTSD & why others do not); establishment of a predictive test to identify individuals with higher/lower likelihood to experience PTSD symptoms; and establishment of a repository of DNA samples & clinical information for future use by military researchers. Approved funding will provide (1) recruitment of participant samples (1500 control, 1500 affected), clinical data and the collection of DNA samples; (2) performance of the genotyping study, supplies and machines for genotyping; and (3) analysis of the data.

Item: Prototype Integration Facility (PIF) Enterprise Resource Planning

(ERP) System

Request: \$3,750,000

Account: Research, Development, Test and Evaluation, Army

Line: 31

PE: 0603003A

Suggested Recipient: Army Aviation and Missile Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The U.S. Army Prototype Integration Facility (PIF) requires the implementation of an Enterprise Resource Planning (ERP) system. The ERP will provide an end-to-end solution that will significantly improve the government's ability to manage this complex \$1.7 billion multi-program contract. The PIF is a key enterprise asset in supporting Overseas Contingency Operations. Since 2002, the PIF has executed in excess of \$1.5 billion in rapid response, quick reaction and high priority weapons system hardware and services support to the warfighter. Funds would be used for the development of an ERP including software development and hardware purchase.

Item: Real-Time Active Imaging System for Tactical UAVs

Request: \$4,000,000

Account: Research, Development, Test and Evaluation, Army

Line: 10

PE: 0602303A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: This technology would give the warfighter the ability to detect enemies who have learned to camouflage themselves from current sensing capabilities. Current technology is too large to fit on tactical UAVs that can get closer to the area of interest. This sensor will be smaller, will fit on tactical UAVs, and be able to more rapidly detect enemies who use camouflaging techniques to hide. It is necessary to combine current technologies with suitable algorithms, signal processing and sensor control to develop an advanced 3-D imaging system. Funding would accelerate development, integration, testing, and demonstration of a 3-D laser radar (LADAR) prototype system.

Item: Remote Monitoring and Troubleshooting (RMAT) Project

Request: \$2,890,000

Account: Other Procurement, Navy

Line: 19

Suggested Recipient: Naval Sea Systems Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: By implementing RMAT, Navy engineers will have the capability to provide global remote sustainment support to the operational fleet. RMAT will provide the means for remotely reading on-board sensors, monitoring shipboard system status, and innovatively supporting ship operations. Saving time, travel dollars, and salary wages by collectively supporting the entire fleet with one office of experts, the program creates a cost avoidance of redundant on-site support while increasing the efficiency and effectiveness of the shore infrastructure. RMAT will enable faster response times and mitigation of damage caused by engineering casualties, blast, fire, flooding, and equipment malfunction. Implementation of RMAT will increase the level of sensor data fusion, situational awareness, and survivability of the ship, as well as its ability to successfully complete its mission. The change from analog systems and manual data collection will save thousands of man-hours every year. FY11 funding for this project will be used to conduct the system design update, deployment plans, and certifications (\$0.8M) and deploy the ship-shore system (\$2.09M).

Item: Sensor Data Processing Research

Request: \$2,000,000

Account: Research, Development, Test and Evaluation, Defense-Wide

Line: 999 **PE:** 0305880L

Suggested Recipient: Missile and Space Intelligence Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The volume of sensor data collected routinely exceeds the ability of the intelligence and military communities to process and fuse the data into actionable intelligence, to provide

situational awareness, and to get the results to the right users and decision makers in a timely manner. Typically, sensed observation data is time-critical and is quickly de-valued within hours or even minutes. Approved funding will provide an efficient and cost-effective resource for researching and developing technologies that will greatly improve the analysis and processing of sensor data for the purpose of expediting operational information and knowledge to users in the intelligence and military communities. Funds will be used for computational resources, research staff, and workforce development.

Item: Software Hardware Asset Reuse Enterprise (SHARE)

Request: \$2,900,000

Account: Research, Development, Test, and Evaluation, Navy

Line: 31

PE: 0603382N

Suggested Recipient: Navy PEO Information Warfare Systems

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Navy Open Architecture initiative includes a library of combat system software and hardware design components for reuse in developing surface ship systems. This effort will extend SHARE across the Naval Enterprise to include sub-surface, air, space, USMC and C4I domains. The goal is to promote reuse of existing software and hardware. This will reduce cost, schedule, and risk while increasing interoperability; reduce time to field; and improve quality in the development of large complex defense systems such as ship combat systems. FY 2011 funds are needed to accelerate development of these key automated services enabling a SHARE repository that can contribute significantly to the goals of the open architecture initiative in a timely fashion.

Item: Solar Heat Reflective Film for Energy & Fuel Efficiency in Buildings and

Vehicles

Request: \$4,000,000

Account: Research, Development, Test & Evaluation, Navy

Line: 58

PE: 0603724N

Suggested Recipient: Naval Facilities Engineering Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The goal of this project is to develop and commercialize an advanced form of Solar Reflective Film. The U.S. Military is tasked with improving the energy efficiency of all its facilities throughout the world. Solar Heat Reflective Film under development utilizing precision multilayer optical film nanotechnology is a key enabler for improving the energy efficiency in military, residential and commercial buildings. Developing this film nanotechnology would also have the additional benefits to military, commercial and consumer vehicles. There is a pressing need in the military to decrease vehicle power requirements, increase fuel efficiency and reduce emissions of carbon dioxide all while increasing the mission effectiveness of the soldier. These goals can be directly impacted by decreasing vehicle weight through the use of smaller air conditioning systems and lighter weight plastic window glazing. This Phase 2 funding will (1) finalize the design of the new multi-layer optical film and introduce new materials to improve the solar heat reflection, (2) complete the scale-up manufacturing runs, and (3) demonstrate the significant impact of this new product through performance testing in buildings and vehicles. Successful completion of Phase 2 is critical for us to launch this product into the marketplace and achieve the full impact of energy savings for our country.

Item:Swarms DefenseRequest:\$6,000,000

Account: Research, Development, Test and Evaluation, Army

Line: 10

PE: 0602303A

Suggested Recipient: Army Aviation and Missile Research Development and Engineering Center

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: There exists a gap between current capabilities and the future Enhanced Area Air Defense System (EAADS) for protection against enemy fires, especially high volume swarms of small munitions, such as mortars and rockets, and larger threats, such as lethal UAVs, cruise missiles, and large caliber rockets. The Swarms Defense System will address this by developing and demonstrating the critical technologies required to augment the gap in current personnel and asset protection capabilities. The U.S. Army Aviation and Missile Research Development and Engineering Center (AMRDEC) would use the requested funding for development of the Swarms Defense System.

Item: Synergistic Enhancements Using Thermal Management and Heat Dissipation

Technology for Missile Defense Electronics/Electro-Optics Cooling

Request: \$3,000,000

Account: Research, Development, Test and Evaluation, Army

Line: 54

PE: 0603308A

Suggested Recipient: Army Space and Missile Defense Command

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Synergistic Enhancements Program will evaluate current thermal management technologies and their use and applications for missile electronics, electro-optics and other missile system components. Current thermal management systems are marginal with respect to cooling the electronics inside missiles to assure reliable targeting and flight path control and do not accomplish multiple functions to optimize overall capability. This program will evaluate mission critical thermal management systems for missile space flight by employing state-of-the-art and under development thermal management tools and hardware. Approved funding will model, build and test prototypes of promising thermal energy heat dissipation systems for initial simulated flight testing environments to be followed by actual full size laboratory tests.

Item: UAS Branch Concept Development

Request: \$3,200,000

Account: Operation & Maintenance, Army (OMA)

BA: 01 **Sub-Activity Group:** 116

Suggested Recipient: Army Aviation School Fort Rucker

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Army Aviation School at Fort Rucker is the lead integrator for all unmanned aircraft and oversees new requirements, innovative technology and defines how best to utilize assets in the full spectrum operations. It serves as the representative on various Office of the Secretary of Defense integrated process teams including airspace, training, facilities, simulations, science and technology, experimentation, intelligence, electronic warfare, frequency, bandwidth protection and spectrum management. Funds will be used to staff the UAS Branch with essential personnel to work with DoD, other agencies, and industry stakeholders to facilitate interoperability and system integration. The end result is relevant and responsive development and realization of UAS concepts to field state-of-the-art UAS capabilities to the warfighter. The Army Aviation School oversees new requirements, innovative technology and defines how best to utilize assets in the full spectrum operation by fully integrating unmanned aircraft as a system-of-systems on the modern and future battlefields.

Item: UH-60A to UH-60L Conversion

Request: \$15,000,000

Account: Aircraft Procurement, Army

Line: 26

Suggested Recipient: Army PEO Aviation

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The UH-60 A to L conversion is needed to recapitalize the aging UH-60As that will be in the inventory for another 15 years and to overcome obsolescence issues on components that were designed over 30 years ago. In 2002, the Army approved a UH-60 Recapitalization Baseline Program that established the A-A program. It was designed to keep UH-60As safe and reliable until they could all be retired. Based on current UH-60M procurement projections, the Army expects to have UH-60As in the inventory beyond 2025. The A-L program is a sustainment effort that has become a natural outgrowth of the original A-A program.

Item: Virtual Convoy Operations Trainers (VCOT)

Request: \$2,000,000

Account: Other Procurement, Army

Line: 177

Suggested Recipient: Alabama Army National Guard

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Alabama Army National Guard currently has one Virtual Convoy Operations Trainer. This trainer has been invaluable in training Alabama Soldiers for operations in Iraq and Afghanistan. A second trainer would double our capacity to train Soldiers. Also, the earliest versions of these trainers need to be upgraded to allow accurate training for current operations in Iraq and Afghanistan. An addition of \$2 million to the FY11 Defense Budget will allow the Alabama Army National Guard to purchase a second trainer and upgrade both trainers with the latest equipment to best replicate the conditions in theater. Alabama Army National Guard units continue to conduct Combat and Security operations in Iraq and Afghanistan. Prior to deployment and while deployed, these units have a heightened requirement to keep their soldiers trained and ready

Item: Wide Wavelength High Efficiency Photovoltaic/Ballistics

Technology Program

Request: \$2,500,000

Account: Research, Development, Test and Evaluation, Army

Line: 14

PE: 0602618A

Suggested Recipient: Army Research Libratory

Suggested Location of Performance: As determined by the suggested recipient **Purpose/Project Description:** This funding will develop a sustainable, light-weight power generation system comprised of a high efficiency solar power (photovoltaic) generator as the main component, a durable storage system, and an intelligent sensor to manage power consumption and distribution. It is a priority of the U.S. military to develop a system to reduce its dependence on traditional batteries, which can be cumbersome, are non-standardized, costly to maintain, and difficult to dispose of efficiently. This system will enable the military to produce and store its own energy to provide power to whatever application it needs in environments where a reliable power source is unavailable.

To be funded in accordance with the Fiscal Year 2011 President's Budget:

Item:Ground-Based Midcourse Defense (GMD)Request:Hold President's Budget at \$1,346,181,000

Account: Research, Development, Test & Evaluation, Defense Wide

Line: 76 **PE:** 0603882C

Suggested Recipient: Missile Defense Agency

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Ground-Based Midcourse Defense (GMD) element is a key component of the Ballistic Missile Defense System (BMDS). This element consist of multiple sensors, a complex communications system, fire control capability, and ground-based interceptors capable of intercepting intermediate and long-range ballistic missile threats in their midcourse of flight. Ground Based Midcourse Defense provides the capability to engage and destroy long-range threats in the midcourse battle space to protect the U.S. Homeland.

Item: Integrated Air and Missile Defense Battle Command System

(IBCS)/Army Integrated Air and Missile Defense (AIAMD)

Request: Hold President's Budget at \$251,124,000

Account: Research, Development, Test & Evaluation, Army

Line: 124

PE: 0605457A Suggested Recipient: U.S. Army

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: IBCS is a key materiel element of the Army's Air and Missile Defense transformation fueled by lessons learned during Desert Storm, Southern Watch, and Iraqi Freedom, and capability gaps where the U.S. is overmatched by rapidly advancing adversary capabilities using ballistic and cruise missiles, rockets, artillery, and mortars. IBCS addresses these lessons learned and the capability gaps by providing warfighters with the ability to provide both adaptable force packages and flexible, joint firing doctrine to engage a myriad of threats.

Item: Joint Air to Surface Standoff Missile (JASSM) Upgrades

Request: Hold President's Budget at \$20,000,000

Account: Research, Development, Test and Evaluation, Air Force

Line: 146
PE: 0207325F
Suggested Recipient: U.S. Air Force

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: JASSM is the United States' only low observable cruise missile system and provides air to surface, autonomous, precision guided standoff compatibility with fighter and bomber aircraft able to attack a variety of fixed or relocatable targets. This funding will (1) develop an Electronic Safe, Arm and Fire (ESAF) device to replace the existing warhead electro-mechanical fuse. The ESAF would improve overall missile reliability by up to 4% and reduce unit cost by \$10,000. (2) Develop a staring array infrared (IR) seeker to replace the existing gimbaled line-of-sight IR seeker. The staring array seeker would eliminate many moving parts and electronic drive circuitry, improve overall missile reliability by up to two percent and reduce unit cost by \$25,000. (3) Develop a compact Telemetry Instrumentation Kit (TIK) which can be installed in the missile at USAF field sites to support reliability flight tests. Eliminates \$50,000 of missile disassembly cost associated with installation of existing TIKs for each flight test missile.

Item: Joint High Speed Vessel

Request: Hold President's Budget at \$180,703,000

Account: Shipbuilding & Conversion, Navy

Line: 18 Suggested Recipient: U.S. Navy **Suggested Location of Performance:** As determined by the suggested recipient **Purpose/Project Description:** The Nation will needs lift assets that can provide for assured access, decrease predictability and dwell time, and have the capacity to quickly deliver troops and equipment together in a manner that provides for unit integrity. Joint High Speed Vessel (JHSV) will provide combatant commanders high-speed intra-theater sealift mobility with inherent cargo handling capability and the agility to achieve positional advantage over operational distances. Not limited to major ports, the JHSV will be able to operate in austere port environments. The Joint High Speed Vessel is one of three

Item: KC-X

Request: Hold President's Budget at \$863,875,000

programs in the Department's "Capital Account Pilot Program."

Account: Research, Development, Test and Evaluation, Air Force

Line: 85

PE: 0605221F Suggested Recipient: U.S. Air Force

Suggested Location of Performance: As determined by the suggested recipient **Purpose/Project Description:** Recapitalization of this aging aircraft that has been declared the number one priority by two successive Chiefs of Staff of the Air Force and two successive Commanders of the United States Transportation Command. With a contract award delayed, sufficient funding is needed to continue RDT&E activities. Otherwise, procurement will be delayed and risk will increase for KC-135 age-related support problems and unanticipated catastrophic failure.

Item: Land Based SM-3

Request: Hold President's Budget at \$281,378,000

Account: Research, Development, Test and Evaluation, Defense-Wide

Line: 107 **PE:** 0604880C

Suggested Recipient: Missile Defense Agency

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Land Based SM-3 combined with the transportable AN/TPY-2 radar provides a regional defense capability across a large battle space. It can be integrated into existing systems such as THAAD and Patriot providing a layered and fully integrated defense defensive capability. LB SM-3 combined with THAAD provides better layered regional defense capability and reuses existing THAAD, Patriot, and the range of ground-based systems while realizing a cost of \$3 billion over 10 years.

Item: Littoral Combat Ship

Request: Hold President's Budget at \$1,509,335 **Account:** Shipbuilding & Conversion, Navy

Line: 12, 13 **Suggested Recipient:** U.S. Navy

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The Littoral Combat Ship is the next major procurement program for the Navy with a projected procurement of 55 ships equating to nearly 18 percent of the future fleet. It will use open-systems-architecture design, modular weapons, and sensor systems, and a variety of manned and unmanned vehicles to expand the battle space and project offensive power into the littoral. LCS will operate with focused-mission packages that deploy manned and unmanned vehicles to execute a variety of missions, including littoral anti-submarine warfare (ASW), anti-surface warfare (SUW), and mine countermeasures (MCM). LCS will also possess inherent capabilities, regardless of mission package installed, including Intelligence Surveillance Reconnaissance (ISR), homeland defense, Maritime Interdiction/Interception Operations (MIO), anti-terrorism/force protection (AT/FP), air self-defense, joint

littoral mobility, and Special Operating Forces (SOF) and logistic support for movement of personnel and supplies. This relatively small, high-speed surface combatant will complement the U.S. Navy's AEGIS fleet, by operating in environments where it is less desirable to employ larger, multi-mission ships.

Item: Maintenance Support Device

Request: Hold President's Budget at \$43,770,000

Account: Other Procurement, Army

Line: 182 Suggested Recipient: U.S. Army

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: The MSD is a lightweight and rugged tester used at all levels of maintenance to automatically diagnose electronic and automotive subsystems of the Army's ground and aviation weapon systems. It hosts interactive electronic technical manuals (IETMs) and expert diagnostics systems, conducts intrusive testing in support of Army weapons and electronic systems, and provides a means to upload/download mission-critical software into weapon system on-board computer processors.

Item: SM-3 Procurement

Request: Hold President's Budget at \$94,080,000

Account: Procurement. Defense-Wide

Line: 33

PE: 0208866C

Suggested Recipient: Missile Defense Agency

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: Beginning in 2011, the Administration will commence the deployment of the Phased Adaptive Approach (PAA) for the defense of Europe with Aegis BMD and SM-3 as the centerpiece of this architecture. Aegis BMD is presently deployed in limited quantities today providing an important missile defense protection against short, medium and intermediate-range ballistic missiles. This capability enables U.S. Navy Aegis ships to detect, track, intercept, and destroy these threats in their ascent and midcourse phases of flight, helping to defend our forward deployed forces and allies. The Joint Capabilities Mix (JCM) Study II recommended an additional 116 SM-3 missiles to support Aegis BMD capability for the defense of Fleet assets. However, the Missile Defense Agency's Top Line budget only supports SM-3 production deliveries at 24/year (2/month) while production capacity is 48/year (4/month).

Item: Standardized Integrated Command Post System (SICPS) / Command Post

Platform (CPP)

Request: Hold President's Budget at \$97,568,000

Account: Other Procurement, Army

Line: 101 Suggested Recipient: U.S. Army

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: To address the critical need for integrated C2 platforms where real time situational awareness and battle command can be executed in standardized, environmentally controlled, modular shelters, and tent systems that are safe, suitable, and supportable. The SICPS/CPP Program provides standard mobile command posts (CPs) at all echelons and across support units to provide an interoperable force package to Combatant Commanders to execute battle command; the preponderance of the systems deployed to date have been focused on the Brigade level command center. This capability allows commanders to be positioned within the battle space where they can best influence operational outcomes without loss of connectivity to elements of the command. The program is intended to support Army and joint requirements for standardized C2 platforms and physical infrastructures that are interoperable across the force.

Item: Surface Launched Advanced Medium Range Air to Air Missile

(SLAMRAAM)

Request: Hold President's Budget at \$116,732,000

Account: Missile Procurement, Army

Line: 2

Suggested Recipient: U.S. Army

Suggested Location of Performance: As determined by the suggested recipient

Purpose/Project Description: SLAMRAAM is a highly mobile and transportable Air and Cruise Missile Defense system consisting of an Integrated Fire Control System (IFCS), a radar, a slewable launcher and the AIM -20 AMRAAM missile. SLAMRAAM provides defense against cruise missiles, unmanned aerial vehicles, fixed wing, and rotary wing aircraft. SLAMRAAM incorporates common C4, improved weapons performance, reduced life cycle costs, and simplified operator training because of platform hardware and software commonality. These efforts include development of common Air and Missile Defense (AMD) software, common Integrated Fire Control (IFC) hardware, voice and data recorder, and Single Integrated Air Picture (SIAP) track management software.

MILITARY CONSTRUCTION

Project Name: Readiness Center **Request**: \$16,630,000

Account: Military Construction, Army National Guard

Project Number: 010263

Service Component: Army National Guard **Project Location:** Ft McClellan, AL

Project Description: Funding will result in the Phase II construction of a permanent readiness center to serve the operational and homeland defense missions of the 167th Theater Support Command. \$13.223 million was provided in FY07 for Phase I construction. This project is in the ARNG FYDP for 2012 and I am requesting to bring this project forward to 2011.

Project Name: Squadron Officer College Lodging Facility

Request: \$14,400,000

Account: Military Construction, Air Force

Project Number: QS063141 **Service Component:** Air Force

Project Location: Maxwell Air Force Base, AL

Project Description: This project will result in the Phase V construction of 82,850 square feet of properly designed quarters for students attending the Squadron Officers School and International Officers School at Maxwell Air Force Base. This project is the fifth phase of an eight-phased program. Phase five through eight will replace existing deteriorating lodging/dormitory facilities that were built in 1956. The project is schedule for FY 2014 and I am asking to bring it forward to 2011.

Project Name: Transmission Addition - Lost Scope

Request: \$2,050,000

Account: Military Construction, Army

Project Number: 77581 **Service Component:** Army

Project Location: Anniston Army Depot, AL

Project Description: Relocate and reinstall seven (7) existing serviceable transmission dynamometer test stands and other serviceable process equipment from the current transmission repair facilities to the new transmission remanufacturing facility. This project results in a \$500K per year savings in transportation costs alone. This project is needed to correct an administrative oversight in PN 57620

Powertrain Transmission Facility Addition (PTAF). The original PTAF DD 1391 did not address the relocation of existing equipment in the Primary Facilities; therefore, it was inadvertently left out of the project documentation. Previously funded using FY 2009 MCA appropriations under PN 57620.

Project Name: Martin Road Widening - West

Request: \$18,500,000

Account: Military Construction, Army

Project Number: 64084 **Service Component:** Army

Project Location: Redstone Arsenal, AL

Project Description: Construct two additional lanes approximately 2.5 miles long on Martin Road from Rideout Road interchange to the west Redstone Arsenal Boundary (Zeirdt Road). The project also includes three bridges, site clearing and preparation, site improvements, utility relocation, traffic markings, turn lanes, median barrier, and access to a new access control point. The project includes wetland mitigation requirements and a Phase II archaeology study. The project is required to relieve congested and unsafe traffic conditions on Martin Road, the major east-west corridor on post.

Project Name: Air Traffic Control Tower

Request: \$9,000,000

Account: Military Construction, Air Force

Project Number: PNQS103165 **Service Component:** Air Force

Project Location: Maxwell Air Force Base, AL

Project Description: An eight-story facility, constructed with a reinforced concrete foundation and floor slab, structural steel frame, masonry walls, elevator, welded-steel tower observation cab with tempered glass windows, and built-up roof. Overall project includes emergency generator system, HVAC, fire protection, communications, extended utilities, site improvements, and all other necessary support. Includes antiterrorism/force protection (ATFP) requirements identified in Department of Defense (DoD) unified facilities criteria. Demolish existing air traffic control tower facilities (407 SM/4,384 SF).

Project Name: Water Survival Training Facility

Request: \$9,000,000

Account: Military Construction, Army

Project Number: 70330 **Service Component:** Army

Project Location: Fort Rucker, AL

Project Description: Construct a Water Survival Training Facility (WSTF) to include classrooms, pool area, administrative offices, maintenance space, support spaces and core functions. Supporting facilities include electrical, water, sewer and gas service; storm drainage system; intrusion detection systems (IDS); utility monitoring and control systems (UMCS); communications; walks, curbs and gutters; paving to include parking and drives; fire protection and alarm systems; and site improvements. Interior design services will be required. Access for individuals with disabilities will be provided. Heating by self-contained systems. Air Conditioning (Estimated 83 Tons). This facility will support the water egress training requirement for the increasing number of Army aviation students.

Pursuant to rules issued by the Senate Armed Services Committee, the following letter was submitted to the committee:

March 11, 2010

The Honorable Carl Levin Chairman Senate Committee on Armed Services 228 Russell Senate Office Building Washington, DC 20510 The Honorable John McCain Ranking Member Senate Committee on Armed Services 228 Russell Senate Office Building Washington, DC 20510

Dear Chairman Levin and Ranking Member McCain:

I certify that neither I nor my immediate family has a pecuniary interest, consistent with the requirements of paragraph 9 of Rule XLIV of the Standing Rules of the Senate, in any of the congressionally directed spending items that I have requested for inclusion in the National Defense Authorization Act for Fiscal Year 2011.

Sincerely,

Jeff Sessions United States Senator